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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,607	01/11/2001	Jeong Hwan Hwang	630-1209P	8011

7590 03/31/2005

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EXAMINER

SELBY, GEVELL V

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/757,607

Applicant(s)

HWANG, JEONG HWAN

Examiner

Gevell Selby

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/07/04 have been fully considered but they are not persuasive.

The applicant's submit the prior art does not disclose a PC camera as claimed in claims 1 and 4. The Examiner respectfully disagrees.

Examiner's Response:

In regard to claims 1 and 4, the Tullis and Suzuki reference both disclose PC cameras. The term "PC camera" is not defined in the specification well known definition of a camera that has a function for transmitting a photographed image to a PC was used in interpreting the claims. The Tullis reference discloses, in figure 3, step 102, figure 4, step 122 and column 5, lines 13-41, transmitting image data to a host computer. In figure 25 and column 29, lines 5-35). Therefore, the Tullis and Suzuki reference disclose the PC camera of claims 1 and 4 as well as their dependent claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 1-2, 4-5, 8, 10, and 12-13 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Tullis (US 6,535,243).

For claim 1, Tullis discloses a PC (personal computer) camera (Figure 1) with various applications comprising:

a memory means for storing digital audio data (Column 8, Lines 15-24);

and a digital audio decoding means (Column 8, Lines 15-24) for reproducing an original sound by decoding the digital audio data stored on the memory means in a digital audio reproducing mode of the PC camera (Abstract; Figure 1; Column 8, Lines 7-24; The audio data is captured by a microphone and stored on the memory. The data can be then be read and replayed on the speaker).

For claim 2, Tullis discloses the previous limitations of claim 1, and also wherein the PC camera further comprises a storing means for storing digital Audio data form the PC on the memory means (Column 8, Lines 15-24).

For claim 4, Tullis discloses a PC (personal computer) camera with various applications, comprising:

a viewfinder (Element 68) for recognizing direction and range of a photographing object (Column 4, Lines 61-64: It is inherent that the viewfinder or LCD shows the image that is being captured as the image is captured; it allows the photographer to easily place the camera in the correct range and direction to take the picture of the object. When an image is being photographed on the LCD is turned on, the image is displayed; therefore, it recognizes range and direction of the object);

a memory means (Element 52) for storing a photographed compressed image (Column 4, Lines 25-47) and digital audio data (Column 8, Lines 7-24; Element 52 stores the digital audio data; Tullis clearly teaches that voice data is managed in the same manner as image data);

an image-processing means for transmitting a picture processed photographing image signal to a PC coupled to the PC camera in a videoconference mode (Figure 2, Element 56; Column 5, Lines 13-41), storing the picture processed-photographing image signal on the memory means after compressing the image signal in a digital camera mode (Column 4, Lines 27-31), transmitting the compressed image signal stored on the memory means to the PC in a still image transmission mode (Column 4, Lines 27-31);

a digital audio decoding means for reproducing the original sound by decoding the digital audio data stored on the memory when a digital audio reproducing mode is set in the PC camera (Column 8, Lines 7-24); and

a control means (Figure 2 Element 56) for controlling the operation corresponding to the pertinent mode after judging if the PC camera is in the videoconference mode, digital camera mode, still image transmission mode (Column 2, Line 40 though Column 3, Line 40) or digital audio reproducing mode (Figure 2, Element 64; Column 4, Lines 53-60; Column 7, Lines 52-65; The control means controls the still video and digital transmission modes as is explained Column 8, Lines 15-24).

For claim 5, Tullis discloses all the previous limitations of claim 4, and also wherein the image-processing means stores the digital audio data from the PC on the memory means (Column 8, Lines 7-24).

For claim 8, Tullis discloses all the previous limitations of claim 4, and also wherein the PC camera further comprises additional memory means for storing the photographed image and digital audio data, the additional memory means being detachable from and attachable to the PC camera (Figure 2, a laptop computer is considered a memory means, which is able to store photos or images transmitted from the PC camera).

For claim 10, Tullis discloses all the previous limitations of claim 4, and also wherein the PC camera further comprises a wireless communication means for converting a photographed image or a compressed image stored on the memory means into a wireless signal and transmitting the wireless signal to the PC (Column 8, Lines 7-24; Column 2, Lines 40-57, Column 5, Lines 14-42).

For claim 12, Tullis discloses all the previous limitations of claim 10, and also wherein the PC camera further comprises a wireless communication means stores the digital audio data received from the PC through a wireless memory means (Column 8, Lines 7-24; Column 2, Lines 40-57).

For claim 13, Tullis discloses all the previous limitations of claim 4, and also wherein the PC camera further comprises a second display (Figure 2, display 8) for displaying an image photographed at the present in addition to a first display for displaying a subject to be photographed (Column 5, Lines 4-7).

- 4. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki, US 6,380,975.**

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For claim 1, Suzuki discloses a PC (personal computer) camera (Figure 1 and figure 25) with various applications comprising:

a memory means (Element 103) for storing digital audio data (Figure 43);

and

a digital audio decoding means (Figure 18 and Column 20, Line 55 through Column 21, Line 43) for reproducing original sound by decoding the digital audio data stored on the memory mean (Element 103) in a digital audio reproducing mode of the PC camera (Column 37, Lines 30-54; Column 37, Lines 15-20).

The image and voice data is recorded in the recording mode. It is then stored on the memory as a character code. The character code then has to be decoded in order or it to be replayed in the regeneration mode.

For claim 3, Suzuki discloses the previous limitations of claim 1, wherein the PC camera automatically switches into the digital audio reproducing mode when an earphone is inserted into the PC camera (Column 38, Lines 10-57: The earphone is connected in the jack. The detection is made and thus the switch is activated to turn the Suzuki invention into a voice reproduction or digital audio reproducing mode).

5. Claims 1, 16, 17-20, and 22-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Hashimoto et al. (US 6,344,875).

For claim 1, Hashimoto et al., US 6,344,875, discloses a PC (personal computer) camera (Figure 1) with various applications comprising:

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a memory means (figure 12, element 16) for storing digital audio data (Column 7, Lines 44-45);

and a digital audio decoding means (figure 8, element 3) for reproducing an original sound by decoding the digital audio data stored on the memory means in a digital audio reproducing mode of the PC camera (column 7, lines 45-51).

For claim 16, Hashimoto et al. discloses the PC camera with various applications according to claim 1, further comprising:

first detecting means for detecting whether the PC camera is electrically separated from a PC (see column 10, lines 50-62); and

mode switching means for automatically switching the PC camera to one of different modes of the PC camera based on the detection result (see column 10, lines 53-67).

For claim 17, Hashimoto et al. discloses the PC camera with various applications according to claim 16, wherein the first detecting means includes the following:

a switch disposed at an area where the PC camera mates with a holder for the PC camera (figure 2c, element 192 and column 4, lines 65-67).

For claim 18, Hashimoto et al. discloses the PC camera with various applications according to claim 16, further comprising:

second detecting means (element 18) for detecting a use state of a lens of the PC Camera (column 7, lines 27-30).

For claim 19, Hashimoto et al. discloses the PC camera with various applications according to claim 18, wherein the mode switching means places the PC camera in a

digital camera mode to use the PC camera as a handheld camera apart from the PC, if the first detecting means detects that the PC camera is electrically separated from the PC and if the second detecting means detects that the lens of the PC camera is in a use state (see column 10, lines 30-34: It is inherent that if the camera is apart from the PC and the lens is in a use state, the camera will be in a record function since the camera cannot communicate separated).

For claim 20, Hashimoto et al. discloses the PC camera with various applications according to claim 18, wherein the mode switching means places the PC camera in a still image transmission mode if the first detecting means detects that the PC camera is electrically connected to the PC and if the second detecting means detects that the lens of the PC camera is not in a use state (see column 10, lines 30-34 and 48-54: It is inherent the camera will not switch to transmit mode while driving the lens for photographing mode).

For claim 22, Hashimoto et al. discloses a PC (personal computer) camera comprising:

a detector to detect if the PC camera is electrically connected to a PC (see column 10, lines 50-62), wherein the PC camera operates as a handheld digital camera used independently from the PC if the detector detects that the PC camera is electrically separated from the PC (column 9, lines 48-56: When the camera is not attached to the base and computer, it can capture images).

For claim 23, Hashimoto et al. the PC camera according to claim 22, wherein the detector includes a switch disposed at an area where the PC camera mates with a holder

for the PC camera (figure 2c, element 192 and column 4, lines 65-67).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 6-7, 9, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tullis (US 6,535,243) in view of Suzuki (US 6,380,975).**

For claim 6, Tullis discloses all the previous limitations of claim 4, but lacks teaching wherein the control means judges and determines a mode change to the digital audio reproducing mode when an earphone is inserted into the PC camera in a state in which the lens cap of the PC camera is closed. However, Tullis does disclose a control switch that activates the camera into a digital audio reproducing mode (Column 8, Lines 7-24). Specifically, Tullis lacks teaching of the earphone and the lens cap.

Nevertheless, Suzuki teaches the digital audio reproducing mode when the earphone is inserted (Column 37, Line 60 through Column 39, Line 10). Suzuki does not specify whether a lens cap is closed or open.

Official notice is taken that it is well-known in the art to use a lens cap detection device to determine if the lens cap is closed and inhibit recording mode until it is removed so that the desired photographing object will not be blocked by the cap.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have been motivated to use the lens cap when it is closed to determine the state of whether the camera would be recording or reproducing in combination with an earphone being inserted into an earphone jack at the time of the invention in order to determine whether the camera is in reproducing or recording mode as suggested by Suzuki in Column 38, Lines 11-64.

For claim 7, Tullis and Suzuki disclose the obvious limitations of claim 6, and Suzuki also discloses wherein the PC camera comprises a switch inside of an earphone jack, the switch being turned on when the earphone is inserted into the PC camera, which in turn turns on the digital audio reproducing mode (Column 37, Line 60 through Column 39, Line 10).

For claim 14, Tullis discloses the previous limitations of claim 4, but lacks teaching wherein the PC camera further comprises a plurality of adjustment buttons for switching in to the video conference mode or the digital camera mode or the digital audio reproducing mode, for starting photographing in the digital camera mode, for selecting a music in the digital audio reproducing mode, and for selecting functions including a reproducing start function and volume adjustment function.

However, Suzuki teaches wherein the PC camera comprises additionally a plurality of adjustment buttons (Column 18, Lines 36-62) for switching in to the video conference mode or digital camera mode (Column 18, Line 48) or digital audio reproducing mode (Column 20, Line 55 through Column 21, Line 6). Column 17, Lines 65-67), starting photographing in the digital camera mode (Column 18, Line 48),

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selecting a music in the digital audio reproducing mode (Column 20, Line 64 through Column 21, Line 6), and selecting functions such as a reproducing start (Column 18, Line 46) and volume adjustment (Figure 16', Column 19, Line 39 through Column 20, Line 54). It is noted that Tullis does teach a control interface (64) to allow an operator to control the functions of the camera (Column 4, Lines 53-60)

Adding the functionality and buttons of the Suzuki reference would have been obvious to one of ordinary skill in the art at the time of the invention to the control interface (64) of Tullis in order to allow more sophisticated still picture and motion picture data that is combined with digital voice data as suggest by Suzuki in Figures 16 and 19 (See also Column 18, Lines 24-36).

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tullis (US 6,535,243) in view of Narayanaswami (US 6,657,654).

For claim 11, Tullis discloses all the previous limitations of claims 4, but lacks teaching wherein a USB standard is used for data transfer between the PC and the PC camera.

Narayanaswami teaches a camera with wireless high speed data transfer to a computer, wherein a USB standard is used for data input/output (Column 4, Lines 33-54).

It would have been obvious for one skilled in the art to have been motivated to configure the system of Tullis with USB data transfer of Narayanaswami in order to enable rapid data transfer between the camera and PC (Column 4, Lines 35-39).

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tullis (US 6,535,243) in view of Suzuki (US 6,380,975) in further view of Ando (US 4,888,795).

For claim 15, Tullis and Suzuki discloses the previous limitations of claim 14, but lacks teaching wherein the PC camera further comprises a hold key for invalidating a function buttons of non-selected modes. However, Tullis and Suzuki do teach and disclose a multifunction PC camera with numerous switches and buttons as previously noted. The idea and teaching of a disable key or a hold key to invalidate functions after they are selected is not taught in either Suzuki or Tullis. This would be useful in many situations and certainly when one would not want a picture to be transmitted (Column 1, Lines 35-40).

Nevertheless, Ando teaches a video telephone apparatus that uses a key that invalidates or disables (Figure 1, Element 73) a picture from being sent during video teleconferencing. This would be beneficial if a bad picture were taken.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have been motivated to configure a hold key that disables a picture from being sent after it has been selected in the apparatus of Tullis and Suzuki in order to not send an undesirable picture image as suggested by Ando in Column 4, Lines 35-40.

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tullis (US 6,535,243) in view of Torres et al. (US 6,738,075).

In regard to claim 21, Tullis discloses the PC camera with various applications according to claim 1. The Tullis reference does not disclose wherein the digital audio data are MP3 audio data downloaded by a PC coupled to the PC camera through a network.

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Torres et al. Discloses wherein the digital audio data are MP3 audio data downloaded by a PC coupled to the PC camera through a network (see column 4, lines 19-22 and column 5, lines 46-55).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Tullis (US 6,535,243) in view of Torres et al. (US 6,738,075) to have wherein the digital audio data are MP3 audio data downloaded by a PC coupled to the PC camera through a network, since MP3 is a common internet format.

11. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto et al. (US 6,344,875) in view of Narayanaswami (US 6,657,654).

For claim 24, Hashimoto discloses all the previous limitations of claims 22, wherein the detector detects a receipt of a RS-232. The Hashimoto reference does not disclose connecting with a USB signal from the PC.

Narayanaswami teaches a camera with wireless high speed data transfer to a computer, wherein a USB standard is used for data input/output (Column 4, Lines 33-54).

It would have been obvious for one skilled in the art to have been motivated to configure the system of Hashimoto with USB data transfer of Narayanaswami in order to enable rapid data transfer between the camera and PC (Column 4, Lines 35-39).

12. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto et al. (US 6,334,875) in view of Torres et al. (US 6,738,075).

In regard to claim 21, Hashimoto et al. discloses the PC camera according to claim 22, further comprising a player to play back PCM, AC-3 or MPEG-2 audio data

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downloaded from the PC (column 6, lines 26-39). The Hashimoto reference does not disclose playing back MP3 audio data downloaded from the PC.

Torres et al. (US 6,738,075) discloses a PC camera with a player to play back MP3 audio data downloaded from the PC (see column 5, lines 46-55 and column 6, lines 64-65).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Hashimoto et al. (US 6,334,875) in view of Torres et al. (US 6,738,075) to have a player to play back MP3 audio data downloaded from the PC in order to add soundtracks to presentation of the captured images.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gvs



TUAN HO
PRIMARY EXAMINER